

# memorandum

DATE: February 25, 2000

REPLY TO  
ATTN OF: Office of Environmental Policy and Guidance: Boulos: 6-1306

SUBJECT: Multi-Agency Radiological Laboratory Analytical Protocols (MARLAP) Manual.

TO: Distribution

The purpose of this memorandum is to inform the Department of Energy (DOE) elements on the status of the MARLAP manual. The manual is a document that provides guidance for the planning, implementation and assessment phases of those projects, involving laboratory analysis of radionuclides. This guidance is intended for project planners, managers and laboratory personnel. The manual's basic goal is to provide guidance to assure the generation of consistent and comparable data among projects and programs and to ensure that laboratory data meet project-specific data quality objectives. The manual is being developed by an interagency team that includes representatives for six Federal agencies and participants from two States. DOE is represented by the Environmental Measurements Laboratory, the National Analytical Management Program, and the Office of Environmental Policy and Guidance.

A MARLAP fact sheet detailing the status of the MARLAP manual is attached. If you have any questions concerning the MARLAP project, please contact Emile Boulos at: [emile.boulos@eh.doe.gov](mailto:emile.boulos@eh.doe.gov); 202-586-1306.

Andrew Wallo III  
Director  
Air, Water and Radiation Division

Attachment

## **Attachment**

### **MULTI-AGENCY RADIOLOGICAL LABORATORY ANALYTICAL PROTOCOLS (MARLAP) MANUAL.**

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The Multi-Agency Radiological Laboratory Analytical Protocols (MARLAP) manual addresses the need for nationally consistent approach to producing radioanalytical laboratory data that meets a project's or program's data requirements. This need was recognized as a result of variability of data quality that may not support the required decision; increased likelihood of repeated analyses and additional costs; inconsistent approach between federal agencies; and potential erosion of public confidence in radioanalytical laboratory data.

#### **PURPOSE:**

Provides guidance for the planning, implementation and assessment phases of those projects involving laboratory analysis of radionuclides. The manual's basic goal is to provide guidance to assure the generation of consistent and comparable data projects and programs and to ensure that laboratory data meet project-specific data quality objectives.

#### **DESCRIPTION:**

This manual covers all major aspects of radioanalytical laboratory work in the areas of sample receipt, sample preparation, radioanalytical separation techniques, method selection, nuclear counting instrumentation, quality assurance and quality control, measurement statistics, data reporting and waste disposal. In addition to the area of the project planning process, development of quality assurance project plans, data validation and selection and evaluation of laboratories.

#### **AUDIENCE:**

The MARLAP manual was developed as a multi-agency guidance document to support project managers and radioanalytical laboratories personnel in executing a wide range of programs, projects and activities involving radioanalytical laboratory measurements. These activities include but not limited to site characterization, cleanup and decommissioning, routine environmental monitoring, background studies, and waste management and effluent monitoring.

## **APPROACH:**

The manual uses a performance-based approach. This approach involves clearly defining the analytical data needs and requirements of a project or program during the planning phase of a project. These project-specific analytical data needs and requirements then serve as objectives or criteria for selections and decisions as to exactly how the laboratory analysis will be conducted during the implementation phase of a project. The analytical requirements established during project planning are subsequently used as criteria for evaluating analytical data during the assessment phase.

## **PARTICIPANTS:**

The MARLAP manual is being developed, as a multi-agency guidance document, by the MARLAP workgroup. Participants include: U.S. Environmental Protection Agency (EPA), U.S. Department of Energy (DOE), including (the National Analytical Management Program, the Environmental Measurements Laboratory, and the Office of Environmental Policy and Guidance, Air, Water, and Radiation Division), U.S. Nuclear Regulatory Commission (NRC), U.S. Department of Defense (DoD), U.S. National Institute of Standards and Technology (NIST), U.S. Geological Survey (USGS), and the U.S. Food and Drug Administration (FDA). State participation in the development of the manual involved contributions from representatives from the Commonwealth of Kentucky and the State of California.

## **MARLAP STATUS:**

The draft MARLAP manual will be available at: <http://www.eml.doe.gov/marlap/system/login.cfm> for interagency review approximately by March 6, 2000. Comments should be provided by May 6, 2000. The agency point of contact will provide a password to the website. DOE contact is Mr. Stan Morton, at 208-526-2186.

## **REVIEW PROCESS:**

The MARLAP workgroup chaired by Mr. John Griggs, EPA, expect to distribute a draft manual for comment approximately by March 6, 2000. The agency point of contact will notify a target list of reviewers at that agency with the workgroup request for comments. The reviewers will send their comments to the EML website.

Mr. Morton, DOE, will coordinate the compilation and organization of all

DOE comments. Comments from all participating agencies will be reviewed and discussed by the MARLAP workgroup. The workgroup will be tasked with the resolution of comments that may involve contacting a reviewer on a specific issue for better understanding of his/her viewpoints. The manual will then be revised on a consensus-based approach.

It is anticipated that the MARLAP workgroup will begin a series of meetings starting approximately in June-July, 2000 time frame, to discuss the outcome of the interagency reviews. The MARLAP workgroup plans to seek public comment in a subsequent draft through publication of a notice of availability in the Federal Register. Target date for the public comment is yet to be determined.

**QUESTIONS:**

Questions concerning this fact sheet should be directed to: Emile Boulos at: [emile.boulos@eh.doe.gov](mailto:emile.boulos@eh.doe.gov); 202-586-1306.

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